

REMARKS

By the foregoing amendments to the specification, a cross-reference to the parent international application has been provided and the claims have been amended to better conform to U.S. practice and to omit multiple dependencies. New claims 35-64 find support in original claims 5-7, 18, 22, 25, 28, 30, 33 and 34.


The filing fee has been calculated based on the claims as amended above. No new matter has been added.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE ✓

Please amend claims 5-7, 10, 12, 13, 17, 18, 20-22, 24, 25, 27, 28, 30, 32 and 33, as follows:

5. (Amended) Apparatus according to [any preceding claim] Claim 4, wherein the cross-sectional area of at least one of the inlet and outlet manifolds is such that said pressure varies between any two chambers by an amount less than that which would give rise to significant differences in droplet ejection properties between said two chambers in the array.

6. (Amended) Apparatus according to [any preceding claim] Claim 4, wherein the array of chambers is linear.

7. (Amended) Apparatus according to [any preceding claim] Claim 4, wherein said array is angled to the horizontal and said inlet manifold extends parallel to the array, the properties of said inlet manifold varying in a direction lying parallel to the array in such a way as to substantially match the rate of pressure loss along the inlet manifold due to viscous losses in the inlet manifold to the rate of increase of static pressure along the inlet manifold due to gravity.

10. (Amended) Apparatus according to Claim 8 [or Claim 9], comprising a common fluid outlet manifold for said array of chambers.

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12. (Amended) Apparatus according to Claim 10 [or Claim 11], comprising means for generating a fluid flow into said common fluid manifold, through each chamber in the array and into said common fluid outlet manifold.

13. (Amended) Apparatus according to [any of Claims] Claim 8 [to 12] wherein said array is arranged substantially vertically.

17. (Amended) Apparatus according to Claim 15 [or Claim 16], wherein said pump control means comprises a fluid level sensor located in said first fluid reservoir and is adapted to control said pump means in dependence on an output from said fluid level sensor.

18. (Amended) Apparatus according to [any of Claims 14 to 17] Claim 16, comprising temperature control means for controlling the temperature of fluid conveyed from the second fluid reservoir to the first fluid reservoir.

20. (Amended) Apparatus according to [Claim 18 or] Claim 19, wherein said temperature control means comprises means for reducing the temperature of fluid conveyed from said at least one chamber to the first fluid reservoir.

21. (Amended) Apparatus according to [any of Claims 18 to 20] Claim 19, comprising a conduit for conveying fluid from the first fluid reservoir to said at least one droplet fluid chamber, said temperature control means comprising a

temperature sensor located in said conduit and being adapted to control the temperature of fluid conveyed from the second fluid reservoir to the first fluid reservoir depending on an output from said temperature sensor.

22. (Amended) Apparatus according to [any of Claims 14 to 21] Claim 20, comprising means for conveying fluid from said first fluid reservoir to said second fluid reservoir when the fluid level in said first fluid reservoir exceeds a given level.

24. (Amended) Apparatus according to [Claim 22 or] Claim 23 wherein said means for conveying fluid from said first fluid reservoir to said second fluid reservoir comprises a conduit extending between said first and second reservoirs and having an inlet in said first fluid reservoir above said given level.

25. (Amended) Apparatus according to [any of Claims 14 to 24] Claim 23, comprising means for supplying fluid to said second fluid reservoir, and fluid supply control means for controlling the supply of the fluid to said second fluid reservoir depending on the fluid level in said second fluid reservoir.

27. (Amended) Apparatus according to [Claim 25 or] Claim 26, wherein said fluid supply control means comprises a fluid level sensor located in said second fluid reservoir and is adapted to control the supply of fluid to said second fluid reservoir in dependence on an output from said fluid level sensor.

28. (Amended) Apparatus according to [any of claims 14 to 27] Claim 26, comprising a third fluid reservoir communicating with said second fluid reservoir, and means for conveying fluid from said third reservoir to said second reservoir in dependence on the fluid level in said second fluid reservoir.

30. (Amended) Apparatus according to [any of Claims 14 to] Claim 29, comprising means for conveying fluid from said second fluid reservoir to said at least one droplet fluid chamber.

32. (Amended) Apparatus according to [Claim 30 or] Claim 31, comprising means for diverting the conveyance of fluid away from said first fluid reservoir to said at least one droplet fluid chamber.

33. (Amended) Apparatus according to [any of Claims 14 to 32] Claim 31, wherein the or each chamber comprises a channel connected to said first and second fluid reservoirs at respective ends thereof, and to a nozzle for droplet ejection at a point intermediate said respective ends.

Please add new claims 35-64, as follows:

35. Apparatus according to Claim 1, wherein the cross-sectional area of at least one of the inlet and outlet manifolds is such that said pressure varies between any two chambers by an amount less than that which would give rise to significant differences in droplet ejection properties between said two chambers in the array.

36. Apparatus according to Claim 1, wherein the array of chambers is linear.

37. Apparatus according to Claim 1, wherein said array is angled to the horizontal and said inlet manifold extends parallel to the array, the properties of said inlet manifold varying in a direction lying parallel to the array in such a way as to substantially match the rate of pressure loss along the inlet manifold due to viscous losses in the inlet manifold to the rate of increase of static pressure along the inlet manifold due to gravity.

38. Apparatus according to Claim 14, comprising temperature control means for controlling the temperature of fluid conveyed from the second fluid reservoir to the first fluid reservoir.

39. Apparatus according to Claim 14, comprising means for conveying fluid from said first fluid reservoir to said second fluid reservoir when the fluid level in said first fluid reservoir exceeds a given level.

40. Apparatus according to Claim 14, comprising means for supplying fluid to said second fluid reservoir, and fluid supply control means for controlling the supply of the fluid to said second fluid reservoir depending on the fluid level in said second fluid reservoir.

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41. Apparatus according to Claim 14, comprising a third fluid reservoir communicating with said second fluid reservoir, and means for conveying fluid from said third reservoir to said second reservoir in dependence on the fluid level in said second fluid reservoir.

42. Apparatus according to Claim 14, comprising means for conveying fluid from said second fluid reservoir to said at least one droplet fluid chamber.

43. Apparatus according to Claim 14, wherein the or each chamber comprises a channel connected to said first and second fluid reservoirs at respective ends thereof, and to a nozzle for droplet ejection at a point intermediate said respective ends.

44. Apparatus according to claim 14 comprising means connected between the respective ends of the channel for bypassing fluid flow around the channel.

45. Apparatus according to Claim 16, comprising means for conveying fluid from said first fluid reservoir to said second fluid reservoir when the fluid level in said first fluid reservoir exceeds a given level.

46. Apparatus according to Claim 16, comprising means for supplying fluid to said second fluid reservoir, and fluid supply control means for controlling the supply of the fluid to said second fluid reservoir depending on the fluid level in said second fluid reservoir.

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47. Apparatus according to Claim 16, comprising a third fluid reservoir communicating with said second fluid reservoir, and means for conveying fluid from said third reservoir to said second reservoir in dependence on the fluid level in said second fluid reservoir.

48. Apparatus according to Claim 16, comprising means for conveying fluid from said second fluid reservoir to said at least one droplet fluid chamber.

49. Apparatus according to Claim 16, wherein the or each chamber comprises a channel connected to said first and second fluid reservoirs at respective ends thereof, and to a nozzle for droplet ejection at a point intermediate said respective ends.

50. Apparatus according to claim 16 comprising means connected between the respective ends of the channel for bypassing fluid flow around the channel.

51. Apparatus according to Claim 19, comprising means for supplying fluid to said second fluid reservoir, and fluid supply control means for controlling the supply of the fluid to said second fluid reservoir depending on the fluid level in said second fluid reservoir.

52. Apparatus according to Claim 19, comprising a third fluid reservoir communicating with said second fluid reservoir, and means for conveying fluid from

said third reservoir to said second reservoir in dependence on the fluid level in said second fluid reservoir.

53. Apparatus according to Claim 19, comprising means for conveying fluid from said second fluid reservoir to said at least one droplet fluid chamber.

54. Apparatus according to Claim 19, wherein the or each chamber comprises a channel connected to said first and second fluid reservoirs at respective ends thereof, and to a nozzle for droplet ejection at a point intermediate said respective ends.

55. Apparatus according to claim 19 comprising means connected between the respective ends of the channel for bypassing fluid flow around the channel.

56. Apparatus according to Claim 23, comprising a third fluid reservoir communicating with said second fluid reservoir, and means for conveying fluid from said third reservoir to said second reservoir in dependence on the fluid level in said second fluid reservoir.

57. Apparatus according to Claim 23, comprising means for conveying fluid from said second fluid reservoir to said at least one droplet fluid chamber.

58. Apparatus according to Claim 23, wherein the or each chamber comprises a channel connected to said first and second fluid reservoirs at respective

ends thereof, and to a nozzle for droplet ejection at a point intermediate said respective ends.

59. Apparatus according to claim 23 comprising means connected between the respective ends of the channel for bypassing fluid flow around the channel.

60. Apparatus according to Claim 26, comprising means for conveying fluid from said second fluid reservoir to said at least one droplet fluid chamber.

61. Apparatus according to Claim 26, wherein the or each chamber comprises a channel connected to said first and second fluid reservoirs at respective ends thereof, and to a nozzle for droplet ejection at a point intermediate said respective ends.

62. Apparatus according to claim 26 comprising means connected between the respective ends of the channel for bypassing fluid flow around the channel.

63. Apparatus according to Claim 29, wherein the or each chamber comprises a channel connected to said first and second fluid reservoirs at respective ends thereof, and to a nozzle for droplet ejection at a point intermediate said respective ends.

64. Apparatus according to claim 29 comprising means connected between the respective ends of the channel for bypassing fluid flow around the channel.